

Single Family Residential Re-roofing

Roofing material installation checklist for the successful installation and longevity of your new roof

Shakes and Wood Shingles

- Felt interlace on shakes shall be 18" type 30 installed at twice the weather exposure of the material. Example: 24" shakes with 10" exposure, felt is applied at 20" from the butt.
- Install type 30 felt under hip and ridge.
- Replace any damaged or rusted metal.
- Starter course at eaves shall be doubled.
- Minimum shake width of 4" required.
- Offset gaps from course to course with a minimum 1 1/2" side lap.
- Provide a 1/4" to 3/8" gap for shingles.
- Provide a 3/8" to 5/8" gap for shakes.
- Step flashing must be interlaced at roof to sidewall junctions.
- Raise flashing at jacks vents and sidewall junctions.
- For hip and ridge caps double the first cap and alternate the overlaps. 10" exposure for 24" shakes and 7 1/2" for 18".
- A minimum 1 1/2" edge and 1" eave overhang is required. Two fasteners per shake/shingle 1" in from edge 2" up from exposure line.
- Shakes/shingles in valleys must be angle cut.
- Limit the number of exposed fasteners.
- Defective shakes, i.e. bark, knots, curling and thin areas are not permitted.

3 Tab or Laminate Shingles

- A cricket or saddle shall be installed on the ridge side of any chimney greater than 30" inches wide.
- A starter course with factory adhesive at the eave line or a manufactured starter with a tar sealant is required.
- Fasten with 4 nails per strip shingle and 6 nails in high wind areas. Do not nail into the factory applied adhesive. Locate fasteners per manufacturer's instructions.
- A 5" maximum exposure is allowed.
- There should be no tab offset joints closer than 4" between adjacent rows.
- A maximum 5" exposure for hip and ridge caps is allowed.
- Raise all roof jacks and vents so that shingles are underneath the lower edge of the flange -- shingle over the top and sides at least past the point of roof penetration. Fasten down the lower edge.
- At roof to vertical junctions, shingle under the flashing.
- At sidewall junctions, provide sealant unless the re-roof is a tear-off, then re-interlace with step flashing.
- An edge and eave overhang of 3/8" - 1/2" is required.
- Closed, woven or open valleys must be properly installed.
- Replace any damaged or rusted metal.
- Nail heads must be flush with shingle surface, not penetrating the shingles or above shingle surface.

Interlocking

- A starter course is required.
- Nails & nail placement must be per manufacturer's specifications.
- Raise flashing at all jacks, vents and roof to vertical junctions.
- Hand seal with roofing adhesive or face nail gable and rake edges.
- Hand seal loose tabs at valleys. Closed valleys are not allowed.
- A maximum 5" exposure for hip and ridge caps is allowed.
- An edge and eave overhang of 3/8" - 1/2" is required.

Tile, Metal & Special Roofs

- An engineered analysis of the roof structure is required if the roofing material type exceeds 7.5 pounds per square foot.
- These roofs must be applied as per manufacturer's specifications.
- A mid roof inspection may be required.
- A complete copy of the manufacturer's specifications and installation instructions must be on site and available for the installers and the building inspector.

Rolled Roofing

- Rolled roofing is allowed for low slope roofs with a pitch as low as 2:12.
- Rolled roofing may be used on a slope as low as 1:12 if it is installed using the concealed nail method or the double coverage method as per the manufacturer's installation instructions.
- For low slope applications, please contact your Building Department.
- An edge and eave overhang of 3/8" - 1/2" is required.

It is recognized that it may not be possible to satisfy all specific rules and regulations in all cases, particularly when re-roofing. If you have questions please call your Building Department.

This handout was developed by the Colorado Chapter of the International Code Council as a basic plan submittal under the 2003 International Residential Code. It is not intended to cover all circumstances. Check with your Department of Building Safety for additional requirements.